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## EVALUATION OF USER TECHNICAL PAMPHLET ON MECHANIZATION OF TRACK OPERATIONS



- 1.. This Office has been asked to evaluate a pamphlet on mechanization of track operations submitted as a technical paper by the USSR delegation to the ECE "Group of Experts to Study Certain Technical Railway Questions."
- 2. We have evaluated this document on the basis of three criteria: a)
  the intelligence value; b) the availability of the same or similar information
  in other Soviet literature; and c) the value of the technical data to US industry.

This document is of negligible intelligence value. Track maintenance, improvement and construction is a subject of considerable intelligence interest, but the pamphlet is poorly organized and written, and is ambiguous in many important respects. Moreover, the description of the machinery and equipment used by USSR railroads, contained in the document is available in more detailed form in many sources, among them Tekhnicheskiy Spravochnik Zheleznodorozhnika and Ustroystvo Soderzhaniya i Remant Puti. The article stresses machinery, equipment and daily output norms, but does not provide much information on the basic methods and organization for track work. It fails to make clear, moreover, what the replacement cycles are for various components of track, how general is the use of the equipment and practices described, and who decides what work is to be done and when. Work norms are given in ambiguous terms with no real explanation of what is done by whom and in what period of time. In brief, in this paper there is some emphasis on the details of the machinery and equipment, but specific

application is described inadequately, and obviously available and useful statistics are omitted. We have the impression that this may have been a rather good technical article to start, but that it was reduced in scope by a poor editor or good security man.

It is interesting, nevertheless, that in our judgment this article in subject matter and scope appears to respond more nearly to the spirit intended by the exchange of papers among the members of the ECE Group of Experts, than any other USSR paper submitted to the Group and reviewed by this Office. Moreover, the oral discussion of this paper among the experts may produce information on USSR track maintenance and construction that would be of considerable intelligence value. We doubt, however, that this paper can be regarded as an important contribution to the literature on this subject available to US railroads.

The history of track work in the US covers three stages: a) hand work,

b) power hand tools, and 3) machines. It appears from the subject article that

the USSR is about midway between stage two and three, at least for a part of its

railroad system. There are certain other points of difference between US and

USSR railroads in this work: a) the US railroads use staggered rail joints rather

than opposed rail joints, b) the US railroads have a lower average traffic density

than the USSR railroads, c) the US railroads carry out track work on a company

rather than on a national basis as is the case in the USSR. These considerations

make USSR practices only remotely applicable and of little interest to US railroads

today. Moreover, the US railroad literature indicates that we have knowledge of

the practices advanced in the USSR pamphlet, and the equipment and machines described in the pamphlet appear to be crude, clumsy and poorly designed when compared with types used in the US for similar purposes. The pamphlet also discusses briefly certain types of equipment and machinery as being under development or proposed which the US railroads already have in use. We believe, however, that a more definitive and better written article on this subject might have been of considerable professional interest to US railroad personnel concerned with the problems associated with track maintenance and construction.

The basic document and a brief, rough translation of it are attached hereto.

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